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cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gaatattggg 180

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<211> 546

<212> DNA

<213> Homo sapiens

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gacagcacg ccgcgagtcc gagagaggag ccgcgggcgc cgtggataga gcaggagggg $240\,$

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<213> Homo sapiens

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cgagtccgag agaggggccg cgggcgccgt ggatagagca ggaggggccg gaatattggg $180\,$

accggaacac acagatetge aagaccaaca cacagactga cegagagage ctgeggaacc $240\,$

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<213> Homo sapiens

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<211> 1017

<212> DNA

<213> Homo sapiens

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gacagegacy cegegatec gaggatggeg cecegggege catggataga geaggagggg $240\,$

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agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360 aggatgtacg gctgcgacgt ggggccggac gggcgcctcc tccgcgggca 420 tgaccagtcc gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480 gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc 540 ggagcagtgg agageetace tggagggeet gtgcgtggag tggeteegea gatacetgga gaacgggaag 600 gagacgctgc agcgcgcgga ccccccaaag acacatgtga cccaccaccc catctctgac 660 catgaggcca ccctgaggtg ctgggccctg ggcttctacc ctgcggagat 720 cacactgacc tggcagcggg atggcgagga ccaaactcag gacaccgagc ttgtggagac cagaccagca 780 ggagatagaa ccttccagaa gtgggcagct gtggtggtgc cttctggaga 840 agagcagaga tacacatgcc atgtacagca tgaggggctg ccgaagcccc tcaccctgag atgggagcca 900 tcttcccagt ccaccatccc catcgtgggc attgttgctg gcctggctgt 960 cctagcagtt gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

<210> 1224

<211> 546

<212> DNA

<213> Homo sapiens

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<210> 1225

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<212> DNA

<213> Homo sapiens

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360

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<212> DNA

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accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

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<212> DNA <213> Homo sapiens

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cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc $$180\$

gacagcgacg ccgcgagtcc gaggatggcg ccccgggcgc catggataga gcaggagggg \$240\$

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<211> 1017

<212> DNA

<213> Homo sapiens

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<211> 1017

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| ccggagtatt ttaccgagag | gggaccggga 300 | gacacagatc | tccaagacca | acacacagac |
| agcctgcgga cacttggcag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| acgatgtatg tgaccagtcc | gctgcgacgt 420 | ggggccggac | gggcgcctcc | tccgcgggca |
| gcctacgacg gaccgcggcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgagctcctg |
| gacacggcgg ggagcagtgg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgaggc |
| agagcctacc gaacgggaag | tggagggcct 600 | gtgcgtggag | tggctccgca | gatacctgga |
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| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
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<213> Homo sapiens

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egeggggage ecegetteat eteagtggge taegtggaeg acaegeagtt egtgaggtte $180\,$

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<212> DNA

<213> Homo sapiens

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| ccggagtatt ttaccgagag | gggaccggaa 300 | cacacagatc | tccaagacca | acacacagac |
| aacctgcgga catcatccag | tegegeteeg 360 | ctactacaac | cagagcgagg | ccgggtctca |
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| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
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| ceggecegge 120 |
| egeggggage ecegetteat egeagtggge taegtggaeg acacceagtt egtgaggtte 180 |
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| agagcetace tggagggeet gtgcgtggag tegeteegea gatacetgga gaacgggaag 600 |
| gagacgctgc agcgcgcga ccccccaaag acacatgtga cccaccaccc catctctgac 660 |
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<211> 1017

<212> DNA

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<212> DNA

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<212> DNA

<213> Homo sapiens

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| aacctgcgga caccctccag | tcgcgctccg 360 | ctactacaac | cagagcgagg | ccgggtctca |
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<211> 1017

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<212> DNA

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<400> 1289

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cgagtccgag gatggcgcc cgggcgccat ggatagagca ggagggccg gagtattggg $$180\$

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accggaacac acagatetec aagaccaaca cacagactta cagagagage ctgcggaacc $240\,$

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<212> DNA

<213> Homo sapiens

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| gacagcgacg gcaggagggg | ccgcgagtcc 240 | gaggacggag | ccccgggcgc | catggataga |
| ccggagtatt ttaccgagag | gggaccggaa 300 | cacacagatc | ttcaagacca | acacacagac |
| agcctgcgga catcatccag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| aggatgtatg tgaccagtcc | gctgcgacct 420 | ggggcccgac | gggcgcctcc | tccgcgggca |
| gcctacgacg gaccgcggcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgagctcctg |
| gacaccgcgg ggagcagctg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgtggc |
| agagcctacc gaacgggaag | tggagggcct 600 | gtgcgtggag | tggctccgca | gatacctgga |
| gagacgetge egtetetgae | agcgcgcgga 660 | cccccaaag | acacacgtga | cccaccaccc |
| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
| tggcagcggg cagaccagca | atggcgagga 780 | ccaaactcag | gacactgagc | ttgtggagac |
| ggagatagaa agagcagaga | ccttccagaa 840 | gtgggcagct | gtggtggtgc | cttctggaga |
| tacacatgcc atgggagcca | atgtacagca 900 | tgaggggctg | ccgaagcccc | tcaccctgag |
| tcttcccagt cctagcagtt | ccaccatccc 960 | catcgtgggc | attgttgctg | gcctggctgt |
| gtggtcatcg aggtgga | gagctgtggt 1017 | cgctactgtg | atgtgtagga | ggaagagctc |

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<212> DNA
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agcgacgccg
             120
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              240
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              300
atgtatggct
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tacgacggca
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accgcggctc
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gcgcgg
546
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|--------------------------|-------------------|------------|------------|------------|
| cgcggggagc cgtgaggttc | cccgcttcat 180 | cgcagtgggc | tacgtggacg | acacccagtt |
| gacagcgacg gcaggagggg | ccgcgagtcc 240 | gaggacggag | ccccgggcgc | catggataga |
| ccggagtatt ttaccgagag | gggaccggaa 300 | cacacagatc | ttcaagacca | acacacagac |
| agcctgcgga catcatccag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| aggatgtatg taaccagtac | gctgcgacct 420 | ggggcccgac | gggcgcttcc | tccgcgggca |
| gcctacgacg gaccgcggcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgagctcctg |
| gacaccgcgg ggagcagctg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgtggc |
| agagcctacc gaacgggaag | tggagggcct 600 | gtgcgtggag | tggctccgca | gatacctgga |
| gagacgctgc cgtctctgac | agcgcgcgga 660 | cccccaaag | acacacgtga | cccaccaccc |
| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
| tggcagcggg cagaccagca | atggcgagga 780 | ccaaactcag | gacactgagc | ttgtggagac |
| ggagatagaa agagcagaga | ccttccagaa 840 | gtgggcagct | gtggtggtgc | cttctggaga |
| tacacatgcc atgggagcca | atgtacagca 900 | tgaggggctg | ccgaagcccc | tcaccctgag |
| tcttcccagt cctagcagtt | ccaccatccc 960 | catcgtgggc | attgttgctg | gcctggctgt |

gtggtcatcg gagctgtggt cgctactgtg atgtgtagga ggaagagctc aggtgga 1017

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gacagegacg cegegagtee gaggacggag ceeegggege catggataga geaggagggg 240

ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300

agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca catcatccag 360

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gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcggcg 480

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<212> DNA

<213> Homo sapiens

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gacagegacg cegegagtee gaggacggag ceeegggege catggataga geaggagggg 240

ccggagtatt gggaccggaa cacacagatc ttcaagacca acacacagac ttaccgagag 300

agoctgegga acctgegegg ctactacaac cagagegagg cegggtetea catcatecag $$360\ \]$

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gcctacgacg gcaaggatta catcgccctg aacgaggacc tgagctcctg gaccgcqqcq 480

gacaccgcgg ctcagatcac ccagcgcaag tgggaggggg cccgtgtggc ggagcagctg $\,\,$ 540

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<211> 1017

<212> DNA

<213> Homo sapiens

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tetteceagt ecaceatece categtggge attgttgetg geetggetgt ectageagtt 960

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<212> DNA

<213> Homo sapiens

<400> 1349

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| cgcggggagc cgtgaggttc | cccgcttcat 180 | cgcagtgggc | tacgtggacg | acacccagtt |
| gacagcgacg gcaggagggg | ccgcgagtcc 240 | gaggacggag | ccccgggcgc | catggataga |
| ccggagtatt ttaccgagag | gggaccggaa 300 | cacacagatc | ttcaagacca | acacacagac |
| agcctgcgga catcatccag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| aggatgtatg taaccagttc | gctgcgacct 420 | ggggcccgac | gggcgcctcc | tccgcgggca |
| gcctacgacg gaccgcggcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgagctcctg |
| gacaccgcgg ggagcagctg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgtggc |
| agagcctacc gaacgggaag | tggagggcct 600 | gtgcgtggag | tggctccgca | gatacctgga |
| gagacgctgc cgtctctgac | agcgcgcgga 660 | cccccaaag | acacacgtga | cccaccaccc |
| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
| tggcagcggg cagaccagca | atggcgagga 780 | ccaaactcag | gacactgagc | ttgtggagac |
| ggagatagaa agagcagaga | ccttccagaa 840 | gtgggcagct | gtggtggtgc | cttctggaga |
| tacacatgcc atgggagcca | atgtacagca 900 | tgaggggctg | ccgaagcccc | tcaccctgag |
| | | | | |

tottcccagt ccaccatece categtggge attgttgctg gcctggctgt cctagcagtt 960

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<212> DNA

<213> Homo sapiens

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egeggggage eccepttcat egeagtggge taegtggaeg acaeceagtt egtgaggtte $180\,$

gacagcacg ccgcgagtcc gaggacggag ccccgggcgc catggataga gcaggagggg $$240\,$

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aggatgtatg getgegacet ggggeeegae gggegeetee teegegggea tgaceagtee 420

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<212> DNA

<213> Homo sapiens

<400> 1351

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egeggggage ceegetteat egeagtggge taegtggaeg acaeceagtt egtgaggtte $180\,$

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gcotacgacg gcaaggatta categocotg aacgaggacc tgagotoctg gaccgcggcg $$480\ \ \ \ \ \ \ \, \ \ \, \ \ \, \ \,$

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agagectace tggagggect gtgcgtggag tggctccgca gatacetgga gaacgggaag 600

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<211> 1017

<212> DNA

<213> Homo sapiens

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aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggca taaccaqtac 420

gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg 480

gacaccgegg ctcagatcac ccagcgcaag tgggaggcgg cccgtgtggc qqaqcaqctq 540

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<211> 546

<212> DNA

<213> Homo sapiens

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cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg $$180\$

accggaacac acagatette aagaccaaca cacagaetta eegagagage etgeggaacc 240

tgogoggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct $$300\ \ \,$

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agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480

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gcgcgg 546

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<211> 525

<212> DNA

<213> Homo sapiens

<400> 1354

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cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180

accgggagac acagacttc aagaccaaca cacagactta ccgagagagc ctgcggaacc $240\,$

tgogoggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300

gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca 360

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cgcggggagc cccgcttcat cgcagtgggc tacgtggacg acacccagtt cgtgaggttc $180\,$

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<211> 1017

<212> DNA

<213> Homo sapiens

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| cgcggggagc cgtgaggttc | cccgcttcat 180 | cgcagtgggc | tacgtggacg | acacccagtt |
|--------------------------|--------------------|------------|------------|------------|
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| ccggagtatt ttaccgagag | gggaccggaa 300 | cacacagatc | ttcaagacca | acacacagac |
| agcctgcgga catcatccag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| aggatgtacg taaccagtac | gctgcgacgt 420 | ggggccggac | gggcgcctcc | tccgcgggca |
| gcctacgacg gaccgcggcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgagctcctg |
| gacaccgcgg ggagcagctg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgtggc |
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| catgaggcca cacactgacc | ccctgaggtg 720 | ctgggccctg | ggcttctacc | ctgcggagat |
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| ggagatagaa agagcagaga | ccttccagaa 840 | gtgggcagct | gtggtggtgc | cttctggaga |
| tacacatgcc atgggagcca | atgtacagca 900 | tgaggggctg | ccgaagcccc | tcaccctgag |
| tcttcccagt cctagcagtt | ccaccatccc 960 | catcgtgggc | attgttgctg | gcctggctgt |
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<210> 1357
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tggcagcggg atggcgagga ccaaactcag gacactgagc ttgtggagac cagaccagca 780

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cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg $$180\$

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accggaacac acagacttc aagaccaaca cacagactta ccgagagagc ctgcggaacc $240\,$

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cgagtccgag agaggagccc cgggcgccat ggatagagca ggaggggccg gaatattggg $$180\$

accggaacac acagatetge aagaccaaca cacagaetta eegagagage etgeggaace $240\,$

tgogcggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct $$300\ \ \,$

gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagtccgcc tacgacggca $$\,360\,$

aggattacat egecetgaac gaggaeetga geteetggae egeggeggae acegeggete $$420\:$

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| cgcggggagc cgtgaggttc | cccgcttcat 180 | cgcagtgggc | tacgtggacg | acacccagtt |
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| | | | | |

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546
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<212> DNA

<213> Homo sapiens

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| cgggtctcac ggcgcctcct | atcatccaga 360 | ggatgtatgg | ctgcgacctg | gggcccgacg |
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| ttctggagaa cgaagcccct | gagcagagat 840 | acacatgcca | tgtacagcat | gaggggctgc |
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| agagcctacc gaacgggaag | tggagggcac 600 | gtgcgtggag | tggctccgca | gacacctgga |
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| tcttcccagt cctagcagtt | ccaccatccc 960 | catcgtgggc | attgttgctg | gcctggctgt |
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| tggcagcggg cagaccagca | atggcgagga 780 | ccaaactcag | gacaccgagc | ttgtggagac |
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| | | | | |

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<213> Homo sapiens

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<213> Homo sapiens

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| gcaggagggg | 240 | | | | |
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| gaacgggaag | 600 | | | | |
| | | | | | |
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| cacactgacc | 720 | | | | |
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| , , , , , , | | | | | |

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cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cqtgagqttc 180

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cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg $180\,$

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<211> 546

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cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg 180

accggaacac acagatetac aagaccaaca cacagactga cegagagagc ctgeggaacc $240\,$

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agatcaccca gegeaagtgg gaggeggeee gtgtggegga geagetgaga acctacctgg $480\,$

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gcctacgacg gcaaggatta categocetg aacgaggace tgageteetg gaccgeggeg $$480\ \]$

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<213> Homo sapiens

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<213> Homo sapiens

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cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg $$180\$

accggaacac acagactac aagaccaaca cacagactta ccgagagaac ctgcggaacc $240\,$

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct $300\,$

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aggattacat egecetgaac gaggaeetga geteetggae egeggeggae acegeggete 420

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agggcgagtg cgtggagtgg ctccgcagat acctggagaa cgggaaggac aagctggagc $540\,$

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<213> Homo sapiens

1017

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211/ 101

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 180

accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

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agatctccca gcgcaagttg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg 480

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg qagtattqqq 180

accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

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taaccagtac

360

420

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540

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg 180 gagtattggg

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agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg 480

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg 180

accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct $$300\,$

gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca 360

aggattacat egecetgaac gaggaeetge geteetggae egeegeggae aeggeggete $420\,$

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg $$180\$

accgggagac acagatetec aagaceaaca cacagaetta eegagagaac etgeggateg $240\,$

cgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagc atgtacggct $$300\,$

gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360

aggattacat egecetgaac gaggaeetge geteetggae egeegeggae aeggeggete 420

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ttaccgagag
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cgagtccgag gatggcgccc cgggcgccat ggatagagca ggaggggccg gagtattggg 180

accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

tgogoggcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtacggct $300\,$

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aggattacat egecetgaac gaggaeetge geteetggae egeegeggae aeggeggete $420\,$

agateteeca gegeaagttg gaggeggeec gtgtggegga geagetgaga geetaeetgg $$480\$

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gacagegacg ceaegagtee gaggaaggag cegegggege catggataga geaggagggg 240

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gacacggcgg ctcagatctc ccagcgcaag tgggaggcgg cccgtgaggcgggagagcgg 540

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<213> Homo sapiens

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg qagtattqqq 180

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg gagtattggg $180\,$

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agatcaccca gcgcaagtgg gaggcggcc gtgaggcgga gcagctgaga gcctacctgg $480\,$

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gcgacctggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360

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<213> Homo sapiens

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acceggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace 240

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accgggagac acagatetee aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

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gcgacgtggg gccggacggg cgcctcctcc gcgggcatga ccagtacgcc tacgacggca 360

aggattacat egecetgaac gaggaeetge geteetggae egeegeggae aeggeggete 420

agatetecea gegeaagttg gaggegeee gtgtggegga geagetgaga geetacetgg $480\,$

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accggaacac acagatetac aaggeecagg cacagactga cegagagage etgeggaace $240\,$

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<211> 1017

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cgcggggagc cccgcttcat caccgtgggc tacgtggacg acacgctgtt cgtgaggttc $$180\ \ \,$

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<213> Homo sapiens

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cgagtccgag gaaggagccg cgggcgccat ggatagagca ggaggggccg qagtattqqq 180

accgggagac acagatetac aaggcccagg cacagactga ccgagagagc ctgcgggaacc 240

tgcgcggcta ctacaaccag agcgaggccg ggtctcacac ttggcagagg atgtatggct 300

gcgacctggg gcccgacggg cgcctcctcc gcgggtataa ccagttagcc tacgacggca 360

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gcgcgg 546

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<211> 1017

<212> DNA

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<211> 546

<212> DNA

<213> Homo sapiens

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<211> 1017

<212> DNA

<213> Homo sapiens

<400> 1526

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gacagegacg ccacgagtcc gaggaaggag ccgcgggcgc catggataga gcaggagggg $240\,$

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<211> 904

<212> DNA

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| gacctgggct ggcccggccg | ggctcccact 120 | ccatgaggta | tttctacacc | gccatgtccc | | | |
| cggggagccc tgaggttcga | cgcttcatca 180 | ccgtgggcta | cgtggacgac | acgctgttcg | | | |
| cagcgacgcc aggaggggcc | acgagtccga 240 | ggaaggagcc | gcgggcgcca | tggatagagc | | | |
| ggagtattgg accgagagag | gaccgggaga 300 | cacagatete | caagaccaac | acacagactt | | | |
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| gatgtttggc accaggacgc | tgcgacgtgg 420 | ggccggacgg | gcgcctcctc | cgcgggtacc | | | |
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| cacggcggct agcagctgag | cagatcaccc 540 | agcgcaagtg | ggaggcggcc | cgtgtggcgg | | | |
| agcctacctg acgggaagga | gagggcgagt 600 | gcgtggagtg | gctccgcaga | tacctggaga | | | |
| gacgctgcag tctctgacca | cgcgcggacc 660 | ccccaaagac | acacgtgacc | caccacccca | | | |
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| gcagcgggat gaccagcagg | ggcgaggacc 780 | aaactcagga | cactgagctt | gtggagacca | | | |
| agatagaacc agcagagata | ttccagaagt 840 | gggcagctgt | ggtggtgcct | tctggagaag | | | |
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accgggagac acagatetec aagaceaaca cacagaetta eegagagage etgeggaace $240\,$

tgctccgcta ctacaaccag agcgaggccg ggtctcacac cctccagagg atgtttggct $300\,$

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<210> 1529

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<213> Homo sapiens

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960

<212> DNA <213> Homo sapiens

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cgcggggagc cccgcttcat ctccgtgggc tacgtggacg acacccagtt cqtqaqqttc 180

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<212> DNA

<213> Homo sapiens

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accggaacac acagatette aagaccaaca cacagaetta cegagagage ctgeggaacc $240\,$

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<211> 546

<212> DNA

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<211> 101 <212> DNA

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<212> DNA

<213> Homo sapiens

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1017

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gcctacgacg gcaaggatta categecetg aacgaggace tgageteetg gaccgeggeg $480\,$

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| ccggcccggc 120 |
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| cgtgaggttc 180 |
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| cacactgacc 720 |
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| cagaccagca 780 |
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<213> Homo sapiens

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aacctgcgga tegegeteeg etactacaac cagagegagg eegggtetea caettggcag $360\,$

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<211> 546

<212> DNA

<213> Homo sapiens

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cgagtccgag gacggagccc cgggcgccgt ggatagagca ggagggccg gagtattggg 180

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egeggggage eccepttcat tgeagtggge taegtggaeg acaeceagtt egtgaggtte $180\,$

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egeggggage ceegetteat tgeagtggge taegtggaeg acaeceagtt egtgaggtte $180\,$

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gcctacgacg gcaaagatta categeeetg aacgaggace tgageteetg gaccgeggeg 480

gacaccgcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgaggc ggagcagctg $\,\,$ 540 $\,\,$

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120 ccggcccggc

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cqtqaqqttc 180

gacagcgacg ccgcgagtcc gaggacggag ccccgggcgc catggataga

240 qcaqqaqqqq

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<212> DNA

<213> Homo sapiens

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cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct $300\,$

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aagattacat cgccctgaac gaggacctga gctcctggac cgcggcggac accgcggctc 420

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cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg gagtattggg $180\,$

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cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct $300\,$

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cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct $$300\,$

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accggaacac acagatette aagaccaaca cacagaetta ecgagagaac etgeggateg 240

cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct $300\,$

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gcgcgg 546

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<212> DNA

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accggaacac acagatette aagaccaaca cacagaetta cegagagaac etgeggateg 240

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gcgacgtggg gccggacggg cgcctcctcc gcgggcataa ccagtacgcc tacgacggca 360

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tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg 660

gcgaggacca aactcaggac actgagcttg tggagaccag accagcagga gatagaacct $$ 720

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accggaacac acagatette aagaceaaca cacagaetta ecgagagaac etgeggateg 240

cgctccgcta ctacaaccag agcgaggccg ggtctcacac ttggcagacg atgtatggct $300\,$

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tgaggtgctg ggccctgggc ttctaccctg cggagatcac actgacctgg cagcgggatg $\,\,$ $\,\,$ 660 $\,\,$

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tccagaagtg ggcagctgtg gtggtgcctt ctggagaaga gcagagatac acatgccatg 780

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cgagtccgag gacggagccc cgggcgccat ggatagagca ggaggggccg qagtattqqq 180

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agatcaccca gcgcaagtgg gaggcggccc gtgtggcgga gcagctgaga gcctacctgg $$480\$

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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gcgcgg 546

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<211> 546

<212> DNA

<213> Homo sapiens

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cgagtccgag agaggagccg cgggcgccgt ggatagagca ggaggggccg gagtattggg $$180\ \]$

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<212> DNA

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<212> DNA

<213> Homo sapiens

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1017

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 546

<212> DNA

<213> Homo sapiens

<400> 1636

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<212> DNA

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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360

420

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<213> Homo sapiens

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cgcggggagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cgtgaggttc $180\,$

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egeggggage eeegetteat eteagtggge taegtggaeg acaeceagtt egtgaggtte $180\,$

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<211> 1094

<212> DNA

<213> human leukocyte

<400> 1653

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| ctagctgtcc ctcaggtgga | taggagctgt 1020 | ggtggctgtt | gtgatgtgta | ggaggaagag |
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<213> human leukocyte

<400> 1655

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cgcggagagc cccgcttcat ctcagtgggc tacgtggacg acacgcagtt cqtqcqqttc 180

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agcctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag $360\,$

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<210> 1656

<211> 546

<212> DNA

<213> human leukocyte

<400> 1656

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<210> 1657

<211> 546 <212> DNA

<213> human leukocyte

<400> 1657

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<213> human leukocyte

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<211> 546 <212> DNA

<213> human leukocyte

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<211> 546

<212> DNA

<213> human leukocyte

<400> 1663

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<211> 1015

<212> DNA

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<400> 1664

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cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcagttc $$180\ \ \,$

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agectgegga acctgegegg ctactacaac cagagegagg cegggtetea caccetecag $$360\ \mbox{}$

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gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg $240\,$

ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300

agectgegga acetgegegg etactacaac cagagegagg eegggtetea cacectecag $360\,$

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| cgcggagagc cgtgcggttc | cccgcttcat 180 | cgcagtgggc | tacgtggacg | acacgcagtt |
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tgogoggcta ctacaaccag agcgaggccg ggtctcacat catccagagg atgtatggct 300

gcgacctggg gcccgacggg cgcctcctcc gcgggcatga ccagttagcc tacgacggca 360

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agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagcggaga gcctacctgg 480

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cgagtccaag aggggagccg cgggcccgt gggtggagca ggagggccg gagtattggg $180\,$

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agatcaccca gcgcaagtgg gaggcggccc gtgaggcgga gcagctgaga gcctacctgg 480

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gcgcgg 546

<210> 1768

<211> 546

<212> DNA

<213> human leukocyte

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cgagtccaag aggggagccg cgggcgccgt gggtggagca ggaggggccg qagtattqqq 180

accgggagac acagaactac aagcgccagg cacagactga ccgagtgaac ctgcggaaac 240

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gcctacctgg
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546
<210> 1770
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<211> 1094

<212> DNA

<213> human leukocyte

<400> 1770

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cgcggagagc cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc $180\,$

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ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300

agoctgcgga acctgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360

tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420

gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccgcg 480

gacacggcgg ctcagatcac ccagcgcaag tgggaggcgg cccgtgcggc ggagcagcag $$ 540

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<210> 1771

<211> 1094

<212> DNA

<213> human leukocyte

<400> 1771

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gacagegacg cegegagtee aagaggggag cegegggege egtgggtgga geaggagggg 240

ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacagac tgaccgagtg 300

aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccgggtctca caccctccag 360

tggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta tgaccagtcc 420

gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgccqcq 480

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<211> 1015

<212> DNA

<213> human leukocyte

<400> 1772

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| agcctgcgga caccctccag | acctgcgcgg 360 | ctactacaac | cagagcgagg | ccgggtctca |
| tggatgtatg tgaccagtcc | gctgcgacct 420 | ggggcccgac | gggcgcctcc | tccgcgggta |
| gcctacgacg gaccgccgcg | gcaaggatta 480 | catcgccctg | aacgaggacc | tgcgctcctg |
| gacacggcgg ggagcagtgg | ctcagatcac 540 | ccagcgcaag | tgggaggcgg | cccgtgcggc |
| agagcctacc gaacgggaag | tggagggcac 600 | gtgcgtggag | tggctccgca | gatacctgga |
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| tcttcccagc cctggctgtc | ccaccatccc 960 | catcgtgggc | atcgttgctg | gcctggctgt |
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| <211> 10 <212> DN | 73 15 Ma man leukocyt | e | | |
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| cgcggagag cgtgcggtt | c cccgcttcat c 180 | cgcagtgggc | tacgtggacg | acacgcagtt |
| gacagcgac | g ccgcgagtcc g 240 | gagagggag | ccgcgggcgc | cgtgggtgga |
| ccggagtat tgaccgagt | t gggaccggga g 300 | gacacagaag | tacaagcgcc | aggcacaggo |
| aacctgcgg caccatcca | a aactgcgcgg g 360 | ctactacaac | cagagcgagg | ccggttctca |
| aggatgtat taaccagtt | g gctgcgacct c 420 | ggggcccgac | gggcgcctcc | tccgcgggta |
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| | g ctcagatctc | ccagcgcaag | ttggaggcgg | cccgtgaggc |
| | c tggagggcga | gtgcgtggag | tggctccgcg | gatacctgga |
| | c agegegegga | acgcccaaag | acacacgtga | cccaccatco |
| | a ccctgaggtg | ctgggccctg | ggcttctacc | ctgcggagat |
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780

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<211> 895

<212> DNA

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<400> 1774

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ccggagtatt gggaccggga gacacagaag tacaagcgcc aggcacaggc tgaccgagtg 300

aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 360

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gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcggcg 480

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gagacgetge agegegegga aegeceaaag acaeaegtga eceaeeatee egtetetgae $\,\,$ 660

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<210> 1775

<211> 1014

<212> DNA

<213> human leukocyte

<400> 1775

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cgcggagage cccgcttcat cgcagtgggc tacgtggacg acacgcagtt cgtgcggttc $$180\$

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aacctgcgga aactgcgcgg ctactacaac cagagcgagg ccggttctca caccatccag 360

aggatgtatg gctgcgacct ggggcccgac gggcgcctcc tccgcgggta taaccaqttc 420

gcctacgacg gcaaggatta catcgccctg aacgaggacc tgcgctcctg gaccgcqqcq 480

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atgaggccac cctgaggtgc tgggccctgg gcttctaccc tgcggagatc acactgacct 720

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acacgtgcca tgtgcagcac gaggggctgc aggagccctg caccctgaga tggaagccgt 900

cttcccagcc caccatcccc aacttgggca tcgtttctgg cccagctgtc ctggctgtcc $960\,$

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<210> 1776

<211> 1094

<212> DNA

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<400> 1776

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aacctgcgga aactgcgcgg ctactacaac cagagcgagg acgggtctca caccctccag 360

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1094
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18

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18
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18
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16
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<223> probe for detection
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18
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<223> probe for detection
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16
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<223> probe for detection
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<223> probe for detection
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23
<210> 1993
<211> 21
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<223> probe for detection
<400> 1993
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<223> probe for detection
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39
<210> 1996
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<210> 1997
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ccgtctggca
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tctggaggag tttggccaag ccttttcctt tgaggctcag ggcgggctgg
ctaacattgc
              180
tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
aggccaccaa
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241
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<212> DNA
<213> Homo sapiens
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gtttggccaa
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gccttttcct ttgaggctca gggcgggctg gctaacattg ctatattgaa
caacaacttq
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222
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ggagtttggc
caagcetttt cetttgagge teagggeggg etggetaaca ttgetatatt
gaacaacaac
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<212> DNA
<213> Homo sapiens
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ggagtttggc
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caagcctttt cctttgaggc tcagggcggg ctggctaaca ttgctatatt
qaacaacaac
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225
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tgaatttgat gaagatgagc agttctatgt ggatctggat aaaaaggaga ccgtctggca $120\,$

tctggaggag tttggccaag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc 180

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c 241

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ctggaggagt ttggccaaac cttttccttt gaggctcagg gcgggctggc taacattqct 180

atattgaaca acaacttgaa taccttgatc cagcgttcca accacactca ggccaccaac 240

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<212> DNA

<213> Homo sapiens

<400> 2004

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tgaatttgat gacgatgaga tgttctatgt ggatctggac aagaaggaga ccgtctqqca 120

tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc 180 tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc aggccaccaa 240 241 <210> 2005 <211> 241 <212> DNA <213> Homo sapiens <400> 2005 ccatgtgtca acttatgccg cgtttgtaca gacccataga ccaacagggg agtttatgtt 60 tgaatttgat gaagatgagc agttctatgt ggatctggat aaaaaggaga ccgtctggca 120 tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg ctaacattgc 180 tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc 240 aggccgccaa t 241 <210> 2006 <211> 241 <212> DNA <213> Homo sapiens <400> 2006 ccatgtgtca acttatgccg cgtttgtaca gacgcataga ccaacagggg agtttatgtt 60 tgaatttgat gaagatgagc agttctatgt ggatctggat aaaaaggaga ccgtctggca 120

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              240
aggccgccaa
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tgaatttgat gaagatgagc agttctatgt ggatctggac aagaaggaga
ccgtctggca
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tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg
ctaacattgc
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tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
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aggccgccaa
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<212> DNA
<213> Homo sapiens
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tgaagatgag
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gtttggccga
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gccttttcct ttgaggctca gggcgggctg gctaacattg ctatattgaa
caacaacttg
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tgaatttgat gaagatgagc agttctatgt ggatctggac aagaaggaga
ccgtctggca
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tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg
ctaacattgc
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aggccgccaa
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ccqtctqqca
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tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg
ctaacattgc
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tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
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aggccgccaa

240

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t
241
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atctggagga
             120
gtttggccga gccttttcct ttgaggctca gggcgggctg gctaacattg
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ctatattgaa
caacaacttg aataccttga tccagcgttc caaccacact caggccgcca at
232
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tgaatttgat gaagatgagc agttctatgt ggatctggac aagaaggaga
ccgtctggca
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tctggaggag tttggccgag ccttttcctt tgaggctcag ggcgggctgg
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ctaacattgc
tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
aggccgccaa
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<213> Homo sapiens
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gtctggcatc
tggaggagtt tggccgagcc ttttcctttg aggctcaggg cgggctggct
aacattgcta
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tattgaacaa caacttgaat accttgatcc agcgttccaa ccacactcag
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gccgccaat
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<211> 241
<212> DNA
<213> Homo sapiens
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tgaatttgat gaagatgaga tgttctatgt ggatctggac aagaaggaga
ccgtctggca
              120
tctggaggag tttggccgag ccttttcctt tgaggctcag gqcqqqctqq
ctaacattgc
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tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
aggccgccaa
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<210> 2015
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<213> Homo sapiens
<400> 2015
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ggagtttggc
caagcctttt cctttgaggc tcagggcggg ctggctaaca ttgctatatc
gaacaacaac
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225
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<211> 241
<212> DNA
<213> Homo sapiens
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tgaatttgat gaagatgaga tgttctatgt ggatctggac aagaaggaga
ccgtctggca
              120
tctggaggag tttggccaag ccttttcctt tgaggctcag ggcgggctgg
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ctaacattgc
tatattgaac aacaacttga ataccttgat ccagcgttcc aaccacactc
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aggccaccaa
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241
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tgatgatgat
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qaqatqttct atqtqqatct qqacaaqaaq qaqaccqtct qqcatctqqa
ggagtttggc
             120
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cgagcctttt cctttgaggc tcagggggg ctggctaaca ttgctatatt qaacaacaac $180\,$

ttgaatatcg ctatccagcg ttccaaccac actcaggccg ccaat 225

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<211> 267

<212> DNA

<213> Homo sapiens

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tggagagata catctacaac cgggaggagt acgcgcgctt cgacagcgac gtgggggagt 120

teegggeggt gaeggaetg gggeggeetg etgeggagta etggaacage cagaaggaea 180

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aggccgtgac cctgcagcgc cgagtcc 267

<210> 2019

<211> 261

<212> DNA

<213> Homo sapiens

<400> 2019

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gagagataca totacaaccg ggaggagtac gcgcgcttcg acagcgacgt qqqaqqqttc 120

cgggcggtga cggagctggg gcggcctgct gcggagtact ggaacagcca gaaggacatc $180\,$

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gctggacgag
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261
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gtgggggagt
tccgggcggt gacggagctg gggcggcctg atgaggagta ctggaacagc
cagaaggaca
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267
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<212> DNA

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cgctccaact ctactgctgc taccaatgag gttcctgagg tcacagtgtt ttccaagtct 360

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acacceteat etgtettgtg gacaacatet tteeteetgt ggteaacate acatggetga $$360\ \ \,]$

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attecttett caagateagt taceteacet teeteeette tgetgatgag atttatgaet $\,\,$ $480\,$

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<212> DNA

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gacctgggga ggaaggagac tgtctggtgt ttgcctgttc tcagacaatt tagatttgac 240

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<212> DNA

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tettaeggte cetetggeea gtteacecat gaatttgatg gagaegagea gttetaegtg 180

gacctgggga ggaaggagac tgtctggtgt ttgcctgttc tcagacaatt tagatttgac 240

ccgcaatttg cactgacaaa catcgctgtg acaaaacaca acttgaacat cctgattaaa $300\,$

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gacgagcagt totacgtgga cctggggagg aaggagactg tctggtgttt gcctgttctc $$120\$

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caacctgctg atctgctcgg tgacagattt ctatccaagc cacatcaaag tccggtggtt $360\,$

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180

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<211> 248

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<212> DNA

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caacctgctg gtctgctcag tgacagattt ctatccagcc cagatcaaag tccggtggtt $$\rm 360$$

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<212> DNA

<213> Homo sapiens

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caacctgctg gtctgctcag tgacagattt ctatccagcc cagatcaaag tccggtggtt $360\,$

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<212> DNA

<213> Homo sapiens

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gcaggggcgg cctgatgccg agtactggaa cagccagaag gaagtcctgg agaggacccg $180\,$

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aggggacccg
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gcaggggggg cctgatgccg agtactggaa cagccagaag gaagtcctgg
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229
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gtggcagctt
aagtttgaat gtcatttctt caatgggacg gagcgggtgc ggttgctgga
aagatgcatc
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tataaccaag aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg
ggcggtgacg
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cagcggcgag
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<212> DNA
<213> Homo sapiens
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             120
agcgacgtgg
gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg
             180
aacagccaga
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<210> 2495

<211> 283

<212> DNA

<213> Homo sapiens

<400> 2495

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acggagcggg tgcggttgct ggaaagatgc atctataacc aagaggagtc cqtqcqcttc 120

gacagegacg tgggggagta cegggeggtg aeggagetgg ggeggeetga tgeegagtac 180

tggaacagcc agaaggacct cctggagcag aggcgggccg cggtggacac ctattgcaga 240

cacaactacg gggctgtgga gagcttcaca gtgcagcggc gag 283

<210> 2496

<211> 246

<212> DNA

<213> Homo sapiens

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ggttgctgga aagatgcatc tataaccaag aggagtccgt gcgcttcgac agcgacgtgg 120

gggagtaccg ggcgtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga $$180\$

aggacetect ggageagagg egggeegeeg tggacaceta ttgeagacac aactaegggg 240

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gtggcagctt
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aagatgcatc
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tataaccaag aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg
ggcggtgacg
             240
gagctggggc ggcctgatgc cgagtactgg aacagccaga aggacatcct
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cgggccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag
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cagcggcgag
370
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<213> Homo sapiens
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cgtgcgcttc
             120
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tgccgagtac
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              240
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283
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<212> DNA
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agcgacgtga
              120
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              180
aacagccaga
aggacetect ggagcagagg egggeegegg tggacaceta etgeagacac
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ttggtgagag cttcacagtg cagcggcgag
270
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<211> 270
<212> DNA
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gagcgggtgc
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agcgacgtgg
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180

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gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg

180

aacagccaga

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aacagccaga
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aggacetect ggageaggeg egggeegegg tggacaceta etgeagacae
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270
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<212> DNA
<213> Homo sapiens
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agcgacgtgg
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gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg
aacaqccaqa
             180
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240

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catacacttc
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qacaqcqacq tqqqqqaqtt ccqqqcqqtq acqqaqctqq qqcqqcctqa
tgccgagtac
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tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa
ctactgcaga
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<210> 2506
<211> 265
<212> DNA
<213> Homo sapiens
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agcgacgtgg
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gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
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aggacetect ggageagaag eggggeeggg tggacaatta etgeagacae

240

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265
<210> 2507
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<213> Homo sapiens
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cqtqcqcttc
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gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga
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tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa
ctactgcaga
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283
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<212> DNA
<213> Homo sapiens
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cgtgcgcttc
gacagegacg tgggggagta ccgggcggtg acggagctgg ggcggcctga
tgccgagtac
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tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa
ttactgcaga
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283
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<211> 255
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<400> 2509

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gtgacggagc tggggcgcc tgatgccgag tactggaaca gccagaagga cctcctggag $180\,$

cagaageggg geegggtgga caactaetge agacacaact aeggggttgt ggagagette $240\,$

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<210> 2510 <211> 270

<212> DNA

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gggagttccg ggcggtgacg gagctggggc ggcctgatgc egagtactgg aacagccaga $180\,$

aggacctcct ggagcagaag cggggccggg tggacaacta ctgcagacac aactacgggg 240

ttgtggagag cttcacagtg cagcggcgag 270

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<211> 270
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<213> Homo sapiens
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agcgacgtgg
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aacaqccaqa
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aactacgggg
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<212> DNA
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agcgacgtgg
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aacagccaga
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aactacgggg
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270
<210> 2513
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<212> DNA

<213> Homo sapiens

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taccgggcgg tgacggagct ggggcggcct gatgccgagt actggaacag ccagaaggac 180

ctcctggagc agaagcgggg ccgggtggac aactactgca gacacaacta cggggttgtg 240

gagagettea cagtgeag 258

<210> 2514 <211> 283

<211> 203

<213> Homo sapiens

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acggagcggg tgcggttcct ggacagatac ttccataacc aggaggagaa cgtgcgcttc $$120\$

gacagegacg tgggggagtt cegggeggtg acggagetgg ggeggeetga tgccgagtac 180

tggaacagcc agaaggacct cctggagcag aagcggggcc gggtggacaa ctactgcaga $240\,$

cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag 283

<210> 2515

<211> 283

<212> DNA

<213> Homo sapiens

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gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga tgaggagtac 180

tggaacagcc agaaggacct cetggagcag aageggggce gggtggacaa etactgeaga $240\,$

cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag 283

<210> 2516

<211> 258

<212> DNA

<213> Homo sapiens

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gacagatact tccataaccg ggaggagaac gtgcgcttcg acagcgacgt gggggagttc 120

cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacctc $$180\$

ctggagcaga agcggggccg ggtggacaac tactgcagac acaactacgg ggttggtgag 240

agcttcacag tgcagcgg 258

<210> 2517

<211> 283

<212> DNA

<213> Homo sapiens

<400> 2517

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cgtgcgcttc
gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctgc
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tgcggagcac
tqqaacaqcc aqaaqqacct cctqqaqcaq aaqcqqqqcc qqqtqqacaa
ctactgcaga
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283
<210> 2518
<211> 269
<212> DNA
<213> Homo sapiens
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agcgacgtgg
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aacaqccaqa
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269
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gaaggacctc
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ggttgtggag
              240
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<211> 270
<212> DNA
<213> Homo sapiens
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agcgacgtgg
             120
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aacagccaga
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<213> Homo sapiens
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agcgacgtgg
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agcgacgtgg
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agcgacgtgg
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aacagccaga

180

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ttgtg
245
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agcgacgtgc
             120
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             180
aacagccaga
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aacagccaga
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270
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<211> 266
<212> DNA
<213> Homo sapiens
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agcgacgtgg
             120
gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg
aacaqccaqa
             180
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aggacetect ggagcagaag eggggeeggg tggacaacta etgeagacae

240

aactacqqqq

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266
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<213> Homo sapiens
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cgacgtgggg
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cagccagaag
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<212> DNA
<213> Homo sapiens
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acqtqqqqqa
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240

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agcgacgtgg
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aacagccaga
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aggacctcct ggagcagaag cggggccagg tggacaatta ctgcagacac
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270
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aacagccaga
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ggagcaggtt
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aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga
cagatacttc
             180
tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg
ggcggtgacg
             240
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ggagcagaag
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aacagccaga
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cagatacttc
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tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg gggagtaccg
             240
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<211> 283
<212> DNA
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cgtgcgcttc
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gacagegacg tgggggagta ccgggcggtg acggagetgg ggcggcetga
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tgccgagtac
tggaacagcc agaaggacct cctggagcag aggcgggccg aggtggacac
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283
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agcgacgtgg
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ggagcaggtt
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cagatacttc
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ggcggtgacg
              240
gagetgggge ggeetgatge egagtactgg aacagecaga aggacetect
ggagcagagg
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cgggccgcgg tggacaccta ctgcagacac aactacgggg ttgtggagag
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caqcqqcqaq
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acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagta
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cqtqcqcttc
gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctag
cgccgagtac
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tggaacagcc agaaggacct cctggagcag aggcgggccg cggtggacac
ctactgcaga
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282
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aactacgggg
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<212> DNA
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aactacgggg
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270
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<212> DNA
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aacagccaga
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aactacgggg
             240
ttggtgagag cttcacggtg cagcggcgag
270
<210> 2543
<211> 283
<212> DNA
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cttcaacggg
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acggagcggg tgcggttcct ggacagatac ttctatcacc aagaggagtc
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120

cqtqcqcttc

gacagegacg tgggggagta cegggeggtg aeggagetgg ggeggeetga tgeegagtae 180

tggaacagcc agaaggacct cctggagcag aggcgggccg aggtggacac ctactgcaga 240

cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag 283

<210> 2544

<211> 282

<212> DNA

<213> Homo sapiens

<400> 2544

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gacagegacg tgggggagta ccgggcggtg acggagctgg ggcggcctga tgccgagtac 180

tggaacagcc agaaggacct cetggagcag aggegggeeg aggtggacac etactgeaga 240

cacaactacg gggttggtga gagcttcaca gtgcagcggc ga 282

<210> 2545

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<213> Homo sapiens

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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac agcgacgtgg 120

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aacaqccaqa
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aggacctcct ggagcagaga cgggccgagg tggacaccta ctgcagacac
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266
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<212> DNA
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cctggacaga tacttctatc accaagagga gtacgtgcgc ttcgacagcg
acgtggggga
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gccagaagga
cctcctqqaq caqaqqqqq ccqcqqtqqa cacctactqc aqacacaact
acggggttgg
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tgagagette acagtgeage ggegag
266
<210> 2547
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<212> DNA
<213> Homo sapiens
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ccaagaggag tacgtgcgct tcgacagcga cgtgggggag taccgggcgg
tgacggagct
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ggggcggcct agcgccgagt actggaacag ccagaaggac ctcctggagc

180

agaagcgggc

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225
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<211> 266
<212> DNA
<213> Homo sapiens
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cctggacaga tacttctatc accaagagga gtacgtgcgc ttcgacagcg
acgtggggga
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qtaccqqqcq qtqacqqaqc tqqqqcqqcc taqcqccqaq tactqqaaca
gccagaagga
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cctcctggag cagaggcggg ccgcggtgga cacctactgc agacacaact
acggggttgt
             240
ggagagette acagtgcage ggegag
266
<210> 2549
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<212> DNA
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qtqctqaqct ccccactqqc tttqqctqqq qacacccqac cacqtttctt
ggagcaggtt
             120
aaacatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgga
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tatcaccaag aggagtacgt gegettegac agegaegtgg gggagtaceg ggeggtgaeg 240

180

cagatacttc

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ggagcagagg
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cgggccgagg tggacaccta ctgcagacac aactacgggg ttgtggagag
              360
cttcacagtg
cagcggcgag
370
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<211> 261
<212> DNA
<213> Homo sapiens
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ctggacagat acttctatca ccaagaggag tacgtgcgct tcgacagcga
cgtgggggag
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taccgggcgg tgacggagct ggggcggcct agcgccgagt actggaacag
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ccagaaggac
atectggaag acaggeggge cetggtggae acetactgea gacacaacta
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cggggttgtg
gagagettea cagtgeageg g
261
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<211> 234
<212> DNA
<213> Homo sapiens
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caccaagagg agtacgtgcg cttcgacagc gacgtggggg agtaccgggc
ggtgacggag
             120
ctqqqqcqqc ctqatqccqa qtactqqaac aqccaqaaqq acctcctqqa
             180
gcagaagcgg
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gccgcggtgg acacctactg cagacacaac tacggggttg tggagagctt caca
234
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<212> DNA
<213> Homo sapiens
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ccaagaggag tacgtgcgct tcgacagcga cgtgggggag taccgggcgg
tgacggagct
             120
qqqqcqqcct qatqccqaqt actqqaacaq ccaqaaqqac atcctqqaaq
acqaqcqqqc
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225
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<212> DNA
<213> Homo sapiens
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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
agcgacgtgg
             120
qqqaqtaccq qqcqqtqacq qaqctqqqqc qqcctqatqa qqaqtactqq
aacagccaga
             180
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aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac

aactacgggg 240 ttgtggagag

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<213> Homo sapiens
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gtgacggagc
              120
tggggcggcc tgatgcccag tactggaaca gccagaagga cctcctggag
             180
cagaagcggg
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222
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<212> DNA
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tacttctatc
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accaaqaqqa qtacqtqcqc ttcqacaqcq acqtqqqqqa qtaccqqqcq
gtgacggagc
              120
tggggcggcc tagcgccgag tactggaaca gccagaagga cctcctggag
              180
cagaggcggg
ccgaggtgga cacctactgc agacacaact acggggttgg t
221
<210> 2556
<211> 238
<212> DNA
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<400> 2556
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tacttctatc
               60
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accaagagga gtacgtgcgc ttcgacagcg acgtggggga gtaccgggcg 120 gtgacggagc tggggcggcc tgatgccgag tactggaaca gccagaagga catcctggaa 180 gacaggcggg ccctggtgga cacctactgc agacacaact acggggttgt ggagagcttc acagtgca 238 <210> 2557 <211> 266 <212> DNA <213> Homo sapiens <400> 2557 tttcttggag caggttaaac atgagtgtca tttcttcaac gggacggagc gggtgcggtt 60 cctggacaga tacttctatc accaagagga gtccgtgcgc ttcgacagcg acqtqqqqqa 120 gtaccgggcg gtgacggagc tggggcggcc tgatgccgag tactggaaca 180 gccagaagga cctcctggag cagaggcggg ccgcggtgga cacctactgc agacacaact 240 acggggttgg tgagagette acagtgcage ggcgag 266 <210> 2558 <211> 222 <212> DNA <213> Homo sapiens <400> 2558 atgagtgtca tttcttcaac gggacggagc gggtgcggtt cctggacaga tacttctatc 60

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gtgacggagc

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cagaggcggg
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222
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<211> 249
<212> DNA
<213> Homo sapiens
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gttcctggac
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agatacttct atcaccaaga ggagtccgtg cgcttcgaca gcgacgtggg
ggagtaccgg
              120
gcggtgacgg agctggggcg gcctgatgcc gagtactgga acagccagaa
ggacctcctg
              180
gagcagaagc gggccgcggt ggacacctac tgcagacaca actacggggt
             240
tggtgagagc
ttcacagtg
249
<210> 2560
<211> 246
<212> DNA
<213> Homo sapiens
<400> 2560
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gttcctggac
agatacttct atcaccaaga ggagtacgtg cgcttcgaca gcgacgtggg
              120
ggagtaccgg
gcggtgacgg agctggggcg gcctgatgcc gagtactgga acagccagaa
ggacctcctg
             180
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qaqcaqaaqc qqqqcqqqt qqacaactac tqcaqacaca actacqqqqt

240

tgtggagagc

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ttcaca
246
<210> 2561
<211> 270
<212> DNA
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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
agcgacgtgg
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qqqaqtaccq qqcqqtqacq qaqctqqqqc qqcctqatqc cqaqtactqq
aacagccaga
             180
aggacetect ggageagagg egggeegegg tggacaceta etgeagaeae
aactacqqqq
             240
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270
<210> 2562
<211> 270
<212> DNA
<213> Homo sapiens
<400> 2562
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gagcgggtgc
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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg
aacagccaga
             180
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aggacetect ggageggagg egggeegegg tggacaceta etgeagacac

240

aactacgggg

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ttggtgagag cttcacagtg cagcggcgag
270
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<211> 242
<212> DNA
<213> Homo sapiens
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gcaattccta
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gacagatact tctatcacca agaggagtac gtgcgcttcg acagcgacgt
gggggagtac
             120
cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca
             180
gaaggacttc
ctggaagaca ggcgggccct ggtggacacc tactgcagac acaactacgg
ggttgtggag
             240
aq
242
<210> 2564
<211> 246
<212> DNA
<213> Homo sapiens
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gagcgggtgc
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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
             120
agcgacgtgg
gggagtaccg ggcggtgacg gagctggggc ggcctgatac cgagtactgg
aacagccaga
             180
aggacetect ggageagaag egggeegegg tggacaceta etgeagacac
             240
aactacqqqq
ttggtg
246
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<211> 260
<212> DNA
<213> Homo sapiens
<400> 2565
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ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
agcgacgtgg
gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
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aggacetect ggageagagg egggeegagg tggacaceta etgcagacac
aactacgggg
             240
ctgtggagag cttcacagtg
260
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<211> 270
<212> DNA
<213> Homo sapiens
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gagcgggtgc
ggttcctgga cagatacttc tatcaccaag aggagtacgt gcgcttcgac
agcgacgtgg
             120
gggagttccg ggcggtgacg gagctggggc ggcctagcgc cgagtactgg
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aggacetect ggageagagg egggeegegg tggacaceta etgeagacae

240 ttggtgagag cttcacagtg cagcggcgag 270

180

aacagccaga

aactacgggg

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<211> 270
<212> DNA
<213> Homo sapiens
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tggaacagcc agaaggactt cctggaagac aggcgggccg cggtggacac ctactgcaga 240

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<210> 2646

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<212> DNA

<213> Homo sapiens

<400> 2646

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gggagttccg ggcgtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga $$180\$

aggacatcet ggaagacgag cgggccgcgg tggacaccta ctgcagacac aactacgggg 240

ttgtggagag cttcacagtg cagcggcgag 270

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<211> 283

<212> DNA

<213> Homo sapiens

<400> 2647

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gacagcgacg tgggggggta ccgggcggtg acggactgg ggcggcctga tgaggagtac 180

tqqaacaqcc aqaaqqacct cctqqaqcqq aqqcqqqccq aqqtqqacac ctattgcaga 240

cacaactacg gggttgtgga gagcttcaca gtgcagcggc gag 283

<210> 2648

<211> 266

<212> DNA

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gttccqqqcq qtqacqqaqc tqqqqcqqcc tqatqaqqaq tactqqaaca qccaqaaqqa 180

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<212> DNA

<213> Homo sapiens

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tgagagette acagtgeage ggegag
266
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gcggttcctg
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gggggagttc
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а
241
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250
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cagcgacgtg
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aaggacttcc tggaagacag gcgggccctg gtggacacct actgcagaca
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gttggtg
247
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gagagettea e
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agcgacgtgg
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ttgtggagag cttcacagtg cagcggcgag 270

<210> 2656

<211> 240

<212> DNA

<213> Homo sapiens

<400> 2656

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cgggcggtga cggagctggg gcggcctgat gaggagtact ggaacagcca gaaggacctc 180

ctggagcaga ggcgggccgc ggtggacacc tactgcagac acaactacgg ggttggtgag 240

<210> 2657 <211> 246

<211> 246 <212> DNA

<213> Homo sapiens

<400> 2657

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cctggacaga tacttctata accaagagga gtacgtgcgc ttcgacagcg acgtggggga $120\,$

gttccgggcg gtgacggagc tggggcggcc tgatgaggag tactggaaca gccagaagga $\,$ $180\,$

cttcctggaa gacaggcggg ccgcggtgga caattactgc agacacaact acggggttgg 240

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<212> DNA
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agcgacgtgg
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aacagccaga
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agcgacgtgg
             120
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             180
aacagccaga
aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac
             240
aactacgggg
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270
<210> 2660
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<212> DNA
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agcgacgtgg
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aacagccaga
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aactacgggg
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270
<210> 2661
<211> 269
<212> DNA
<213> Homo sapiens
<400> 2661
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agcgacgtgg
gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg
aacagccaga
             180
aggacttect ggaagacagg egggeegegg tggacaceta etgeagacae
aactacqqqq
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269
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<211> 283
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<213> Homo sapiens
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cgtgcgcttc
gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctga
tgaggagcac
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tqqaacaqcc aqaaqqacat cctqqaaqac aqqcqqqccq cqqtqqacac
ctactgcaga
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cacaactacg gggttggtga gagcttcaca gtgcagcggc gag
283
<210> 2663
<211> 270
<212> DNA
<213> Homo sapiens
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agcgacgtgg
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aacagccaga
             180
aggacttcct ggaagacagg cgggccgtgg tggacaccta ctgcagacac
aactacgggg
              240
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270

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gggggagttc
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cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca
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ggttggtgag
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agcttcacag tgcagcggc
259
<210> 2665
<211> 269
<212> DNA
<213> Homo sapiens
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agcgacgtgg
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gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg
aacagccaga
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269
<210> 2666
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<211> 259

<212> DNA <213> Homo sapiens <400> 2666

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gacagatact totataacca agaggagtac gtgcgcttcg acagcgacgt gggggagttc 120

cgggcggtga cggagctggg gcggcctgat gaggactact ggaacagcca gaaggacttc $180\,$

ctggaagaca ggcggccgc ggtggacacc tactgcagac acaactacgg ggttgtggaag 240

agetteacag tgcagegge 259

<210> 2667 <211> 267

<212> DNA <213> Homo sapiens

<400> 2667

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ttoctggaca gatacttcta taaccaagag gagtacgtgc gcttcgacag cgacgtgggg \$120>

gagttccggg cggtgacgga gctggggcgg cctgatgagg agtactggaa cagccagaag 180

gacctcctgg aagacgaggg ggccgcggtg gacacctact gcagacacaa ctacggggtt 240

gtggagaget teacagtgca geggega 267

<210> 2668 <211> 270

<212> DNA

<400> 2668

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ggttcctgga cagatacttc tataaccaag aggagtacgt gcgcttcgac agcgacgtgg 120

gggagtaccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg aacagccaga $$180\$

aggaetteet ggaagacagg egggeegegg tggacaceta etgeagacac aactaegggg 240

ttggtgagag cttcacagtg cagcggcgag 270

<210> 2669

<211> 270

<212> DNA

<213> Homo sapiens

<400> 2669

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gggagttccg ggcgtgacg gagctggggc ggcctgatga ggggtactgg aacagccaga $$180\$

aggacttect ggaagacagg egggeegegg tggacaceta etgeagacac aactaegggg 240

ttgtggagag cttcacagtg cagcggcgag 270

<210> 2670

<211> 270

<212> DNA

<213> Homo sapiens

<400> 2670

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aacagccaga
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aactacgggg
              240
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270
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<211> 246
<212> DNA
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agcgacgtgg
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246
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<212> DNA
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acqtqqqqqa
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gtaccgggcg gtgacggagc tggggcggcc tgatgaggag tactggaaca
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ggagagette acagtgeage ggegag
266
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<211> 270
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gggagttccg ggcggtgacg gagctggggc ggcctgatga ggagtactgg
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aactacgggg
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agcgacgtgg
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aacagccaga
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aactacgggg
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<212> DNA
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ggagtactct
              120
acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttactgga
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gagacacttc
cataaccagg aggageteet gegettegae agegaegtgg gggagtteeg
ggcggtgacg
             240
gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggacatcct
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cttcacagtg
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cagcggcgag
370
<210> 2676
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<211> 370 <212> DNA <213> Homo sapiens <400> 2676

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acgggtgagt gttatttctt caatgggacg gagcgggtgc ggttactgga gagacacttc $180\,$

cataaccagg aggagetect gegettegae agegaegtgg gggagtteeg ggeggtgaeg 240

gagctggggc ggcctgtcgc cgagtcctgg aacagccaga aggacatcct ggaagacagg 300

cgggccgcgg tggacaccta ctgcagacac aactacgggg ctgtggagag cttcacaqtg 360

cagcggcgag 370

<210> 2677

<211> 270

<212> DNA

<213> Homo sapiens

<400> 2677

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ggttactgga gagacacttc cataaccagg aggagctcct gcgcttcgac agcgacqtqq 120

gggagttccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga $180\,$

aggactteet ggaagacagg egegeegegg tggacaceta ttgeagacac aactaegggg 240

 $\begin{array}{c} \mathtt{ctgtggagag} \ \mathtt{cttcacagtg} \ \mathtt{cagcggcgag} \\ \mathtt{270} \end{array}$

<211> 243

<212> DNA

<213> Homo sapiens

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ctggagagac acttccataa ccaggaggag ctcctgcgct tcgacagcga cgtgggggag $$120\ \ \,$

ttocgggcgg tgacggact ggggcgcct gtcgccgagt cctggaacag ccagaaggac 180

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gag 243

<210> 2679

<211> 266

<212> DNA

<213> Homo sapiens

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ggttactgga gagacacttc cataaccagg aggagctcct gcgcttcgac aggagctgg $$120\$

gggagttccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg aacagccaga 180

aggacatect ggaagacagg egegeegegg tggacaceta etgeagacac aactaegggg 240

ttgtggagag cttcacagtg cagcgg 266

<210> 2680

<211> 235

<212> DNA

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ggagttccgg
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ggacatcctg
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              235
tqtqq
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agcgacgtgg
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aacaqccaqa
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ctgtggagag cttcacagtg cagcggcgag
270
<210> 2682
<211> 283
<212> DNA
<213> Homo sapiens
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60

<400> 2682

cttcaatggg

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gacagcgacg tgggggagtt ccgggcggtg acggagctgg ggcggcctgt
cgccgagtcc
             180
tggaacagcc agaaggacat cctggaagac aggcgcgccg cggtggacac
ctattgcaga
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283
<210> 2683
<211> 270
<212> DNA
<213> Homo sapiens
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             240
aactacgggg
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agcgacgtgg 120
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<212> DNA

<213> Homo sapiens

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agcgacgtgg
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cgtgcgcttc
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<211> 262

<212> DNA

<213> Homo sapiens

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cgggcggtga cggagctggg gcggcctagc gccgagtact ggaacagcca qaaggacatc 180

ctggaagaca agcgggccgc ggtggacacc tactgcagac acaactacgg ggttggtgag 240

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<212> DNA

<213> Homo sapiens

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ggtgagaget teacagtgea geggegag 268

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agcgacgtgg
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aacagccaga
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268

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cggggttgtg
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gagagettea cagtg
255
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<212> DNA
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acgtggggga
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gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga $180\,$

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<212> DNA

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gggagtaccg ggcgtgacg gagctggggc ggcctagcgc cgagtactgg aacagccaga $$180\$

aggacatect ggaagacagg egggeeetgg tggacaceta etgeagacac aactaegggg 240

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<211> 227

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ggagctgggg cggcctgatg ccgagtactg gaacagccag aaggacttcc tggaagacag 180

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266
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cgtgcgcttc
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agcgacgtgg
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tgccgagtac

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<211> 266

<212> DNA

<213> Homo sapiens

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gacagegacg tgggggagtt cegggeggtg acggagetgg ggeggeetag egecgagtac $180\,$

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aacagccaga
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<400> 2718

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cgggcggtga cggagctggg gcggcctgat gccgagtact ggaacagcca gaaggacatc 180

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gggagttccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga 180

aggacetect ggaagacgag egggeegegg tggacaceta etgeagacae aactacgggg 240

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253
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246
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<212> DNA
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<400> 2724

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gggagtaccg ggcggtgacg gagctggggc ggcctgatgc cgagtactgg aacagccaga $180\,$

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 2800

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agetteacag tgeageggeg ag
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gccagaagga
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agcgacgtgg
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cagcgacgtg
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             180
gaacagccag
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aaggacatcc tggagcaggc gcgggccgcg gtggacacct actgcagaca
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agcgacgtgg
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aacagccagg
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gtggcagcct
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aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga
cagatacttc
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ggcggtgacg
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cagccagaag
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gtggcagcct
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aagagggagt gtcatttctt caatgggacg gagcgggtgc ggttcctgga cagatacttc 180

tataaccagg aggagtccgt gcgcttcgac agcgacgtgg gggagtaccg

gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaaqacagg 300

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<211> 235

<212> DNA

<213> Homo sapiens

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gcggtgacgg agctggggcg gcctgacgct gagtactgga acagccagaa ggacttcctg 180

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gaaggacatc
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aactacgggg
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262
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cctgcgcttc
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cgccgagtcc
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ttactgcaga
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283
<210> 2822
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cgccgagtcc
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ttactgcaga
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264
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aactacgggg
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aactacgggg
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120

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agcgacgtgg
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agcgacgtgg
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180

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283
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246
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aactacgggg
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120

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gggggagtac
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gaaggacctc
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
agcgacgtgg
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gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
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aggacctcct ggagcagaag cggggccggg tggacaacta ctgcagacac
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270
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<212> DNA
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gcgggtgcgg
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cgacgtgggg
              120
gagtaccggg cggtgaggga gctggggcgg cctgatgccg agtactggaa
              180
cagccagaag
qacctcctqq aqcaqaaqcq qqqccaqqtq qacaattact qcaqacacaa
ctacggggtt
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ggtgagagct tcacagtgca g
261
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<211> 246
<212> DNA
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gagcgggtgc
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ggttcctgga gagacacttc cataaccagg aggagaacgc gcgcttcgac
agcgacgtgg
             120
qqqaqtaccq qqcqqtqaqq qaqctqqqqc qqcctqatqc cqaqtactqq
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aacagccaga

180

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aactacgggg
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ttggtg
246
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<212> DNA
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gggggagtac
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cgggcggtga gggagctggg gcggcctgtc gccgagtact ggaacagcca
gaaggacctc
             180
ctggagcaga agcggggcca ggtggacaat tactgcagac acaactacgg
             240
ggttggtgag
aq
242
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<212> DNA
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gagcgggtgc
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgagg gagctggggc ggcctagcgc cgagtactgg
aacagccaga
             180
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aactacgggg
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ttggtg
246
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<211> 257
<212> DNA
<213> Homo sapiens
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gagcgggtgc
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
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gggagtaccg ggcggtgacg gagctggggc ggcctgtcgc cgagtcctgg
aacagccaga
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              240
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257
<210> 2846
<211> 283
<212> DNA
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cgcgcgcttc
             120
gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga
tgccgagtac
             180
tqqaacaqcc aqaaqqacct cctqqaqcaq aaqcqqqqcc aqqtqqacaa
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240

ttactgcaga

cacaactacg gggttggtga gagcttcaca gtgcagcggc gag 283

<210> 2847

<211> 283

<212> DNA

<213> Homo sapiens

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acggagcggg tgcggttcct ggagagacac ttccataacc aggaggagta cgcgcgcttc $$120\,$

gacagegacg tgggggagta ccgggcggtg agggagctgg ggcggcctga tgccgagtac 180

tggaacagcc agaaggacat cctggagcag aagcggggcc aggtggacaa ttactgcaga 240

cacaactacg gggttggtga gagcttcaca gtgcagcggc gag 283

<210> 2848

<211> 270

<212> DNA

<213> Homo sapiens

<400> 2848

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gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg aacagccaga 180

aggacctcct ggagcagaag cggggccagg tggacaatta ctgcagacac aactacgggg 240

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270
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gagcgggtgc
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ggctcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
             180
aggacctcct ggagcagaag cggggccagg tggacaatta ctgcagacac
aactacgggg
              240
ttggtgagag cttcacagtg cagcggcgag
270
<210> 2850
<211> 270
<212> DNA
<213> Homo sapiens
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gagcgggtgc
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
             120
agcgacgtgg
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
             180
aggacetect ggageagaag eggggeeagg tggaeaatta etgeagaeae
aactacqqqq
             240
ttgctgagag cttcacagtg cagcggcgag
270
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<211> 270
<212> DNA
<213> Homo sapiens
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agcgacgtgg
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg
aacagccaga
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aggacetect ggageagaag eggggeeagg tggacaceta etgeagacae
aactacgggg
             240
ttggtgagag cttcacagtg cagcggcgag
270
<210> 2852
<211> 270
<212> DNA
<213> Homo sapiens
<400> 2852
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
agcgacgtgg
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qqqaqtaccq qqcqqtqaqq qaqctqqqqc qqcctqctqc qqaqcactqq
aacagccaga
             180
aggacctcct ggagcagaag cggggccagg tggacaatta ctgcagacac
             240
aactacgggg
ttggtgagag cttcacagtg cagcggcgag
270
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<211> 270
<212> DNA
<213> Homo sapiens
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gagcgggtgc
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ggttcctgga gagacacttc cataaccagg aggagtacgc gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgagg gagctggggc ggcctgatgc cgagtactgg
             180
aacaqccaqa
aggacttcct ggagcagaag cggggccagg tggacaatta ctgcagacac
aactacgggg
              240
ttggtgagag cttcacagtg cagcggcgag
270
<210> 2854
<211> 283
<212> DNA
<213> Homo sapiens
<400> 2854
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cttcaatggg
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acggagcggg tgcggttcct ggagagatac ttccataacc aggaggagtt
cgtgcgcttc
              120
gacagegacg tgggggagta cegggeggtg aeggagetgg ggeggeetgt
cgccgagtcc
              180
tggaacagcc agaaggacct cctggagcag aagcggggcc aggtggacaa
ttactgcaga
              240
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283
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cctggagaga tacttccata accaggagga gttcgtgcgc ttcgacagcg acgtggggga 120

gtaccgggcg gtgacggagc tggggcggcc tgtcgccgag tcctggaaca gccagaagga $$180\$

cctcctggag cagaagcggg gccgggtgga caattactgc agacacaact acggggttgg 240

tgagagette aca 253

<210> 2858

<211> 370

<212> DNA

<213> Homo sapiens

<400> 2858

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gtgctgagct ccccactggc tttggctggg gacacccaac cacgtttctt ggagcaggct 120

aagtgtgagt gtcatttcct caatgggacg gagcgagtgt ggaacctgat cagatacatc 180

tataaccaag aggagtacgc gcgctacaac agtgacctgg gggagtacca ggcggtgacg 240

gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacctcct ggagcggagg 300

cagcggcgag 370

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<211> 220
<212> DNA
<213> Homo sapiens
<400> 2859
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agtgacctgg gggagtacca ggcggtgacg gagctggggc ggcctgacgc
tgagtactgg
             120
aacagccaga aggacctcct ggagcggagg cgggccgagg tgggcaccta
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ctgcagatac
aactacgggg ttgtggagag cttcacagtg cagcggcgag
220
<210> 2860
<211> 283
<212> DNA
<213> Homo sapiens
<400> 2860
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cctcaatggg
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acqqaqcqaq tqtqqaacct qatcaqatac atctataacc aaqaqqaqta
cgcgcgctac
             120
aacagtgacc tgggggagta ccaggcggtg acggagctgg ggcggcctga
cqctqaqtac
             180
tqqaacaqcc aqaaqqacct cctqqaqcqq aqqcqqqccq aqqtqqacac
ctactgcaga
             240
tacaactacq qqqttqtqqa qaqcttcaca qtqcaqcqqc qaq
283
<210> 2861
<211> 370
<212> DNA
<213> Homo sapiens
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gtgctgagct ccccactggc tttggctggg gacacccaac cacgtttctt qqagcaqqct 120

aagtgtgagt g
tcatttcct caatgggacg gagcgagtgt ggaacctgat cagatacatc
 $180\,$

tataaccaag aggagtacge gegetacaac agtgacetgg gggagtacea ggeggtgacg $240\,$

gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacctcct ggagcggagg 300

cgggccgagg tggacaccta ttgcagatac aactacgggg ttgtggagag cttcacagtg 360

cagcggcgag 370

<210> 2862

<211> 270

<212> DNA

<213> Homo sapiens

<400> 2862

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ggaacctgat cagatacatc tataaccaag aggagtacgc gcgctacaac agtgatctgg 120

gggagtacca ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga $180\,$

aggacctcct ggagcggagg cgggccgagg tggacaccta ctgcagatac aactacgggg 240

ttgtggagag cttcacagtg cagcggcgag 270

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<212> DNA
<213> Homo sapiens
<400> 2863
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gagcgagtgt
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ggaacctgat cagatacatc tataaccaag aggagtacgc gcgctacaac
agtgacctgg
gggagtacca ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
aacagccaga
aggacctcct ggagcggagg cgggccgagg tggacaacta ctgcagatac
aactacgggg
             240
ttgtggagag cttcacagtg cagcggcgag
270
<210> 2864
<211> 242
<212> DNA
<213> Homo sapiens
<400> 2864
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gtggaacctg
              60
atcagataca totataacca agaggagtac gcgcgctaca acagtgacct
             120
gggggagtac
caggoggtga cggagctggg gcggcctgac gctgagtact ggaacagcca
gaaggacctc
             180
ctggagcgga ggcgggccga ggtggacacc tactgcagac acaactacgg
ggttgtggag
            240
ag
242
<210> 2865
<211> 270
<212> DNA
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<400> 2865

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ggaacctgat cagatacatc tataaccaag aggagtacgc gcgctacaac agtgacctgg 120

gggagtacca ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga 180

aggacctcct ggagcggagg cgggccgagg tggacaccta ctgcagatac aactacqqqq 240

ttgtggagag cttcacagtg cagcggcgag 270

<210> 2866

<211> 300

<212> DNA

<213> Homo sapiens

<400> 2866

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taagtgtgag tgtcatttcc tcaatgggac ggagcctgat cagatacatc tataaccaag 120

aggagtacge gegetacaac agtgacetgg gggagtacca ggeggtgacg gagetgggge $180\,$

ggcctgacgc tgagtactgg aacagccaga aggacctcct ggagcggagg cgggccgagg 240

tggacaccta ctgcagatac aactacgggg ttgtggagag cttcacagtg cagcggcgag 300

<210> 2867

<211> 370

<212> DNA

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gtgctgagct ccccactggc tttggctggg gacacccgac cacgtttctt gcagcaggat $$120\ \ \,$

aagtatgagt gtcatttctt caacgggacg gagcgggtgc ggttcctgca cagagacatc $180\,$

tataaccaag aggaggactt gegettegac agegaegtgg gggagtaceg ggeggtgaeg 240

gagctggggc ggcctgacgc tgagtactgg aacagccaga aggacttcct ggaagacagg 300

cgcgccgcgg tggacaccta ctgcagacac aactacgggg ttggtgagag cttcacaqtq 360

cagcggcgag 370

<210> 2868

<211> 257

<212> DNA

<213> Homo sapiens

<400> 2868

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ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac agcgacqtqq 120

gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg aacagccaga 180

aggacttcct ggaagacagg cgggccgcgg tggacaccta ctgcagacac aactacgggg 240

ttggtgagag cttcaca 257

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<211> 283
<212> DNA
<213> Homo sapiens
<400> 2869
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cttcaacggg
               60
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cgtgcgcttc
gacagcgacg tgggggagta ccgggcggtg acggagctgg ggcggcctga
cgctgagtac
tggaacagcc agaaggactt cctggaagac aggcgcgccg cggtggacac
ctactgcaga
              240
cacaactacq qqqttqqtqa qaqcttcaca qtqcaqcqqc qaq
283
<210> 2870
<211> 250
<212> DNA
<213> Homo sapiens
<400> 2870
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gcggttcctg
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cacagaggca tctataacca agaggagaac gtgcgcttcg acagcgacgt
              120
gggggagtac
cgggcggtga cggagctggg gcggcctgac gctgagtact ggaacagcca
gaaggacttc
             180
ctggaagaca cgcgcgccgc ggtggacacc tactgcagac acaactacgg
             240
ggttggtgag
agcttcacag
250
<210> 2871
<211> 283
<212> DNA
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<213> Homo sapiens
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cttcaacggg
acggagcggg tgcggttcct gcacagagac atctataacc aagaggagga
cttgcgcttc
            120
qacaqcqacq tqqqqqaqta ccqqqcqqtq acqqactqq qqcqqcctqa
cgctgagtac
             180
tqgaacaqcc aqaaqqactt cctggaaqac agqcqgqccc tqqtqgacac
             240
ctactgcaga
cacaactacg gggttggtga gagcttcaca gtgcagcggc gag
283
<210> 2872
<211> 267
<212> DNA
<213> Homo sapiens
<400> 2872
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ggagcgggtg
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cggttcctgc acagagacat ctataaccaa gaggaggacg tgcgcttcga
cagcgacgtg
             120
ggggagtacc gggcggtgac ggagctgggg cggcctgacg ctgagtactg
gaacagccag
             180
aaqqacttcc tqqaaqacaq qcqcqcqcq qtqqacacct actqcaqaca
caactacggg
             240
gttggtgaga gcttcacagt gcagcgg
267
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<210> 2873 <211> 269 <212> DNA

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gagcgggtgc
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ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
aacagccaga
             180
aggacatect ggageaggeg egggeegegg tggacaceta etgeagacae
              240
aactacgggg
ctgtggagag cttcacagtg cagcggcga
269
<210> 2874
<211> 246
<212> DNA
<213> Homo sapiens
<400> 2874
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               60
gagcgggtgc
ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac
             120
agcgacgtgg
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
             180
aacaqccaqa
aggacatect ggaagacagg egegeegegg tggacaceta etgcagacae
aactacqqqq
             240
ttggtg
246
<210> 2875
<211> 246
<212> DNA
<213> Homo sapiens
<400> 2875
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gagcgggtgc
              60
ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac
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agcgacgtgg
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
aacagccaga
             180
aggacttcct ggaaaacagg cgcgcgcgg tggacaccta ctgcagacac
aactacgggg
             240
ttggtg
246
<210> 2876
<211> 268
<212> DNA
<213> Homo sapiens
<400> 2876
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gagcgggtgc
ggttcctgca cagaggcatc tataaccaag aggagaacgt gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
aacaqccaqa
             180
aggacttect ggaagacagg egegeegegg tggacaceta etgeacacaa
ctacggggtt
              240
ggtgagaget teacagtgea geggegag
268
<210> 2877
<211> 270
<212> DNA
<213> Homo sapiens
<400> 2877
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               60
gagcgggtgc
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ggttcctgca cagagacatc tataaccaag aggaggactt gcgcttcgac
agcgacgtgg
             120
gggagtaccg ggcggtgacg gagctggggc ggcctgacgc tgagtactgg
aacagccaga
             180
aggacatect ggageaggeg egggeegegg tggacaceta etgeagacae
aactacgggg
              240
ttggtgagag cttcacagtg cagcggcgag
270
<210> 2878
<211> 270
<212> DNA
<213> Homo sapiens
<400> 2878
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aaggaccaga
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| gccacgacac taccagacct | ccagcagtgg 720 | ggggatgtcc | tgcctgatgg | gaatggaacc |
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| ggcagacatt gttattatta | ccatgtttct 900 | gctgttgctg | ctgctgctgc | tgctatttt |
| ttttctatgt gagctcgtga | ccgttgttgt 960 | aagaagaaaa | catcagctgc | agagggtcca |

gcctgcaggt cctggatcaa cacccagttg ggacgagtga ccacagggat gccacacagc $1020\,$

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660

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<211> 969

<212> DNA

<213> Homo sapiens

<400> 3449

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gccacgacac ccagcagtgg ggggatgtcc tgcctgatgg gaatggaacc taccagacct 720

gggtggccac caggatttgc caaggagagg agcagaggtt cacctgctac atggaacaca 780

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gcagacattc catgittctg ctgttgctgc tgctgctgct gctgctgctg ctatttttgt $900\,$

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| gcctgcagga acagtgcccc | actacggcga 540 | tatctaaaat | ccggcgtagt | cctgaggaga |
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agcoccaggg acagtgggca gaagatgtcc tgggaaataa gacatgggac agagagacca 180

gggacttgac agggaacgga aaggacctca ggatgaccct ggctcatatc aaggaccaga $240\,$

aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea 300

ccaggagete ccagcattte tactacgatg gggagetett ccteteccaa aacetggaga 360

ctgaggaatg gacagtgccc cagtcctcca gagctcagac cttggccatg aacgtcagga 420

attectigaa ggaagatgee atgaagacca agacacacta teaegetatg catgeagact 480

gcctgcagga actacggcga tatctagaat ccagcgtagt cctgaggaga acagtgccc $540\,$

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gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagteatt $840\,$

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<210> 3452

<211> 963

<212> DNA

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<211> 813

<212> DNA

<213> Homo sapiens

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<211> 920

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gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagteatt $840\,$

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gegggaatca cagcactcac cetgtgecet etgggaaagt getggtgett cagagteatt $840\,$

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aagaaggett geatteeete eaggagatta gggtetgtga gateeatgaa gacaacagea $300\,$

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